35

WHAT IS CLAIMED IS

10

15

25

1. A data processing method for identifying whether or not a content data was obtained on the basis of a recording medium having inherent variations in recording sensitivity which is produced by recording a first content data, comprising:

a first step of detecting correlation between a difference between said first content data and second content data obtained from said recording medium and third content data which is an object for inspection and

a second step of deciding whether or not there is any common point derived from said inherent variations in said recording sensitivity between said second content data and said third content data on the basis of said correlation detected in said first step and identifying whether or not said third content data was obtained on the basis of said recording medium on the basis of a result of said decision.

- A data processing method as set forth in claim
 1, wherein said first step uses content data obtained
 from a predetermined recording medium as said first
 content data.
 - A data processing method as set forth in claim
 , wherein said first step detects correlation between
 said third content data obtained from a predetermined

recording medium and said difference.

- 4. A data processing method as set forth in claim

 1, wherein said first step detects correlation between

 said difference between said first content data and said

 second content data and a difference between said first

 content data and said third content.
- 5. A data processing method as set forth in claim1, wherein:

said method further comprises a third step for \$10\$ extracting said difference and

said first step detects correlation between said difference extracted at said third step and said third content data.

6. A data processing method as set forth in claim 15 1, where:

said method further comprises:

20

25

a fourth step of capturing an image obtained from the predetermined recording medium to generate digital first content data;

a fifth step of capturing an image obtained from the recording medium having said inherent variations to generated digital second content data; and

a sixth step of capturing an image obtained from the recording medium which is the object for inspection to generate digital third content data, and

said first step detects correlation between a difference between said first content data generated at said fourth step and said second content data generated at said fifth step and said third content data generated at said sixth step.

7. A data processing method as set forth in claim 1, wherein:

said method further comprises:

10

15

20

a seventh step of extracting a predetermined characteristic quantity from said first content data and

an eighth step of extracting a predetermined characteristic quantity from said third content data, collating said extracted characteristic quantity and said characteristic quantity extracted at said seventh step, and identifying a part having said predetermined characteristic quantity extracted at said seventh step in said third content data, and

said first step detects correlation between said difference between said first content data at a part where said characteristic quantity is extracted at said seventh step and said second content data and a part identified by said eighth step in said third content data.

- 8. A data processing method as set forth in claim 1, wherein:
- 25 said method further comprises a ninth step of

correcting distortion existing in said third content data and

said first step detects correlation between said difference and said third content data corrected at said ninth step.

A data processing method as set forth in claim
 , wherein said first step comprises:

a 10th step of applying an orthogonal transform to said difference and said third content data to generate said first frequency component data and second frequency component data,

10

15

25

an 11th step of dividing complex number data forming said first frequency component data by absolute values of the complex number data to generate first complex number data and dividing complex number data forming said second frequency component data by absolute values of the complex number data to generate second complex number data,

a 12th step of replacing complex number data
20 forming one of said first complex number data and said
second complex number data with conjugate complex number
data to generate third complex number data,

a 13th step of multiplying said first complex number data or said second complex number data not replaced at said 12th step and said third complex number

data generated at said 12th step to generate fourth complex number data, and

a 14th step of applying an inverse orthogonal transform to said fourth complex number data generated at said third step to detect said correlation.

10. A data processing apparatus for identifying whether or not a content data was obtained on the basis of a recording medium having inherent variations in recording sensitivity which is produced by recording a first content data, comprising:

10

15

20

a correlation detecting means for detecting correlation between a difference between said first content data and second content data obtained from said recording medium and third content data which is an object for inspection and

an identifying means for deciding whether or not there is any common point derived from said inherent variations in said recording sensitivity between said second content data and said third content data on the basis of said correlation detected by said correlation means and identifying whether or not said third content data was obtained on the basis of said recording medium on the basis of a result of said decision.

11. A data processing apparatus as set forth in 25 claim 10, wherein said correlation detecting means

detects correlation between said third content data obtained from a predetermined recording medium and said difference.

- 12. A data processing apparatus as set forth in

 5 claim 10, wherein said correlation detecting means
 detects correlation between said difference between said
 first content data and said second content data and the
 difference between said first content data and said third
 content.
- 13. A data processing apparatus for identifying whether or not a content data was obtained on the basis of a recording medium having inherent variations in recording sensitivity which is produced by recording a first content data, comprising:

15

- a correlation detecting circuit for detecting correlation between a difference between said first content data and second content data obtained from said recording medium and third content data which is an object for inspection and
- an identifying circuit for deciding whether or not there is any common point derived from said inherent variations in said recording sensitivity between said second content data and said third content data on the basis of said correlation detected by said correlation

 25 circuit and identifying whether or not said third

content data was obtained on the basis of said recording medium on the basis of a result of said decision.